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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,740	01/26/2004	John P. Jackam	025000-00200	2847

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JONES & SMITH, LLP
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EXAMINER

TOOMER, CEPHIA D

ART UNIT	PAPER NUMBER
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1797

MAIL DATE	DELIVERY MODE
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02/06/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/766,740

Applicant(s)

JACKAM ET AL.

Examiner

Cephia D. Toomer

Art Unit

1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) See Continuation Sheet is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) See Continuation Sheet is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

Continuation of Disposition of Claims: Claims pending in the application are 77-81,83-90,92-94,96,97,99,100,102,104,106,107,109-111,114,119,122-124,126,129-132 and 134-196.

Continuation of Disposition of Claims: Claims rejected are 77-81,83-90,92-94,96,97,99,100,102,104,106,107,109-111,114,119,122-124,126,129-132 and 134-196.

DETAILED ACTION

This Office action is in response to the amendment filed October 22, 2007.

1. The indicated allowability of the claims is withdrawn in view of the newly discovered reference(s) to Arrowsmith (US 2,383,580). Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 132, 134-196 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arrowsmith (US 2,383,580).

Arrowsmith teaches a method of removing desired reaction products from alcoholysis reaction mixtures, more particularly to a process for separately recovering glycerine and alkyl esters in a substantially pure state from said mixtures (see col. 1, lines 1-5).

In forming the reaction mixture for alcoholysis, a fatty a glyceride is contacted with an alcohol, preferably in large excess in the presence of a small amount of a catalyst (see page 1, col. 2, lines 52-55). The skilled artisan also recognizes that the reaction may also proceed in the absence of a catalyst. The reaction temperature is from about 40 C- 160 C (see page 3, col. 1, lines 34-38). Upon completion of the reaction, the mixture may be neutralized to a pH of about 3 to about 10 with an acid

stronger than fatty acids, i.e., acetic, hydrochloric, sulfuric, etc (see page 3, col. 1, lines 64-70; col. 3, lines 11-16). The excess alcohol is removed by distillation at atmospheric pressure, reduced pressure or superatmospheric pressure. After removal of the alcohol, the product is subjected to reduced pressures (1 mm to about 10,mm Hg). The distillate may be fractionally condensed (see page 3, col. 2, line 67 through page 4, col. 1, lines 1-6). Examples VIII teaches purifying the product in a column still.

Arrowsmith fails to teach the specifics regarding the column. However, to determine such parameters would be well within the level of skill in the art.

Arrowsmith does not teach the use of two continuous stirred reactors. However, the courts have held that mere duplication of parts has no patentable significance unless a new and unexpected result is produced.

4. Claims 77-81, 83-90, 92-94,96,97,99,100,102,104,106,107,109-111, 114,119,122-124,126,129-131 and 134-137 rejected under 35 U.S.C. 103(a) as being unpatentable over van Loon. (US 2,588,435) in view of Arrowsmith (US 2,383,580).

Van Loon teaches a process wherein free fatty acids are esterified with an excess of glycerol in the presence of absence of a catalyst at 225 °C (see col. 1, lines 1-6, 44-51; col. 2, lines 3-10, 24-32) to form a mixture of mono-, di-, and triglycerides. This mixture is then submitted to alcoholysis with ethyl or methyl alcohol (see col. 3, lines 13-27; col. 4, lines 54-56) to form ethyl or methyl esters of fatty acids and glycerides (see col. 3, lines 27-29). The esters may be separated from the glycerides by distillation with steam under vacuum(see col. 3, lines 44-47; col. 4, lines 39-43). The catalyst may be an alkali catalyst such as hydroxides or alkali compounds of polyhydric

alcohols (see col. 3, lines 61-66). Van Loon teaches that the esterification may be accomplished in any known manner (see col. 2, lines 28-32).

Van Loon fails to teach the claimed esterification method. However, Arrowsmith teaches this limitation. Arrowsmith has been discussed above and is incorporated herein by reference.

It would have been obvious to one of ordinary skill in the art to use the claimed esterification method because van Loon teaches that any known esterification method may be used and Arrowsmith teaches that the claimed esterification method is conventional.

Van Loon does not teach the use of two continuous stirred reactors. However, the courts have held that mere duplication of parts has no patentable significance unless a new and unexpected result is produced.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cephia D. Toomer whose telephone number is 571-272-1126. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 571-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Cephia D. Toomer
Primary Examiner
Art Unit 1797

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